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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/578,139	Shuji Miyagawa	2520-0132PUS1

2292  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

INTERNATIONAL APPLICATION NO.	
PCT/JP04/16776	
LA. FILING DATE	PRIORITY DATE
11/04/2004	11/04/2003

CONFIRMATION NO. 4669  
371 FORMALITIES LETTER



Date Mailed: 03/01/2010

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT  
APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE  
AND/OR AMINO ACID SEQUENCE DISCLOSURES**

*Filing Date Granted*

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to comply with the sequence rules, 37 CFR §§ 1.821-1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR § 1.821(g). Extension of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR § 1.136. In no case may an applicant extend the period for response beyond the six-month statutory period. Direct the response to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

Applicant filed a request or letter regarding the use of the computer readable form (CRF) of a sequence listing from another application as the CRF of the sequence listing in this application in lieu of filing a CRF in this application. The request or letter, however, does not comply with the requirements of 37 CFR 1.821(e) for the reason(s) listed below. Applicant must make the appropriate correction(s), or file a CRF in this application in compliance with 37 CFR 1.821(e), within the time period for reply set forth in the notice to avoid the abandonment of the instant application.

- No CRF has been filed for the other application, or the designated CRF from the other application is not compliant with 37 CFR 1.821-1.825.

For more information and a sample letter for requesting the use of a CFR from another application, see MPEP 2422.05. For more information regarding electronic filing of sequence listings, see the EFS-Web Legal Framework at <http://www.uspto.gov/efc/portal/efs/legal.htm>.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patent Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patent Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebs>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

BARBARA A CAMPBELL

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Telephone: (703) 756-1461

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/578,139  
Source: JFWO  
Date Processed by STIC: 03/01/2007

# ***ENTERED***



IFWO

RAW SEQUENCE LISTING                      DATE: 03/01/2007  
 PATENT APPLICATION: US/10/578,139              TIME: 14:45:41

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3 <110> APPLICANT: MIYAGAWA , Shuji
4     MATSUNAMI , Katsuyoshi
6 <120> TITLE OF INVENTION: HLA-E CHIMERIC MOLECULE
8 <130> FILE REFERENCE: 2520-0132PUS1
10 <140> CURRENT APPLICATION NUMBER: US 10/578,139
11 <141> CURRENT FILING DATE: 2006-05-03
13 <160> NUMBER OF SEQ ID NOS: 92
15 <170> SOFTWARE: PatentIn version 3.4
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33 Thr Gln Thr Trp Ala
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54           20           25           30
57 Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
58           35           40           45
61 Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
62           50           55           60
65 Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
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75 <212> TYPE: PRT

## RAW SEQUENCE LISTING

DATE: 03/01/2007

PATENT APPLICATION: US/10/578,139

TIME: 14:45:41

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79 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric  
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86 1 5 10 15

89 Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp

90 20 25 30

93 Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr

94 35 40 45

97 Ala Ala Gln Ile Ser Glu Gln Lys Ser Asn Asp Ala Ser Glu Ala Glu

98 50 55 60

101 His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys

102 65 70 75 80

105 Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu

106 85 90

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sequence

116 a3 domain of HLA-E

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122 1 5 10 15

125 Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr

126 20 25 30

129 Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu

130 35 40 45

133 Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala

134 50 55 60

137 Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln

138 65 70 75 80

141 His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp

142 85 90

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148 &lt;213&gt; ORGANISM: Artificial Sequence

150 &lt;220&gt; FEATURE:

151 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric  
sequence

152 Transmembrane domain of HLA-E

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158 1 5 10 15

161 Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Val

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/578,139

DATE: 03/01/2007

TIME: 14:45:41

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186 gcg                                                                                   63
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196           a1 domain of HLA-E
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202 cgcttcattc ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc      120
204 gcgagtcgga ggatgggtgcc gcgggcgccc tggatggagc aggaggggtc agagtattgg      180
206 gaccgggaga cacggagcgc caggacacc gcacagattt tccgagtga tctgcggacg      240
208 ctgcgaggct actacaatca gagcgaggcc      270
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224 cgcggttatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg      120
226 cgctcctgga ccgcggtgga cacggcggct cagatctccg agcaaaagtc aaatgatgcc      180
228 tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa      240
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239 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric
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240           a3 domain of HLA-E
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## RAW SEQUENCE LISTING

DATE: 03/01/2007

PATENT APPLICATION: US/10/578,139

TIME: 14:45:41

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248 ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag      180
250 aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag      240
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260 &lt;220&gt; FEATURE:

261 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric

sequence

262 Transmembrane domain of HLA-E

265 &lt;400&gt; SEQUENCE: 10

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266 aagccggctt cccagcccac catcccatc gtgggcatca ttgctggcct ggttctcctt      60
268 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt      120
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280 &lt;220&gt; FEATURE:

281 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric

sequence

282 SP of HLA-G1

285 &lt;400&gt; SEQUENCE: 11

287 Met Val Val Met Ala Pro Arg Thr Leu Phe Leu Leu Leu Ser Gly Ala

288 1 5 10 15

291 Leu Thr Leu Thr Glu Thr Trp Ala

292 20

295 &lt;210&gt; SEQ ID NO: 12

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298 &lt;213&gt; ORGANISM: Artificial Sequence

300 &lt;220&gt; FEATURE:

301 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric

sequence

302 a1 domain of HLA-G1

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308 1 5 10 15

311 Arg Gly Glu Pro Arg Phe Ile Ala Met Gly Tyr Val Asp Asp Thr Gln

312 20 25 30

315 Phe Val Arg Phe Asp Ser Asp Ser Ala Cys Pro Arg Met Glu Pro Arg

316 35 40 45

319 Ala Pro Trp Val Glu Gln Glu Gly Pro Glu Tyr Trp Glu Glu Glu Thr

320 50 55 60

323 Arg Asn Thr Lys Ala His Ala Gln Thr Asp Arg Met Asn Leu Gln Thr

324 65 70 75 80

327 Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala

328 85 90

331 &lt;210&gt; SEQ ID NO: 13



## RAW SEQUENCE LISTING

DATE: 03/01/2007

PATENT APPLICATION: US/10/578,139

TIME: 14:45:41

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 344 1 5 10 15  
 347 Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp  
 348 20 25 30  
 351 Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr  
 352 35 40 45  
 355 Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu  
 356 50 55 60  
 359 Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg  
 360 65 70 75 80  
 363 Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala  
 364 85 90

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372 &lt;220&gt; FEATURE:

373 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric  
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374 a3 domain of HLA-G1  
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 380 1 5 10 15  
 383 Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Ile  
 384 20 25 30  
 387 Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Val Glu Leu  
 388 35 40 45  
 391 Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
 392 50 55 60  
 395 Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
 396 65 70 75 80  
 399 His Glu Gly Leu Pro Glu Pro Leu Met Leu Arg Trp  
 400 85 90

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408 &lt;220&gt; FEATURE:

409 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric  
 sequence

410 Transmembrane domain of HLA-G1  
 413 <400> SEQUENCE: 15  
 415 Lys Gln Ser Ser Leu Pro Thr Ile Pro Ile Met Gly Ile Val Ala Gly  
 416 1 5 10 15

VERIFICATION SUMMARY

DATE: 03/01/2007

PATENT APPLICATION: US/10/578,139

TIME: 14:45:42

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**BOX SEQUENCE**  
**PATENT**  
2520-0132PUS1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Application of:  
MIYAGAWA , Shuji et al.

Application No.: 10/578,139

Confirmation No.: 4669

Filed: May 3, 2006

Art Unit: Not Yet Assigned

For: HLA-E CHIMERIC MOLECULE

Examiner: Not Yet Assigned

RESPONSE TO NOTICE TO COMPLY

Commissioner for Patents  
P.O. BOX 1450  
Alexandria, VA 22313-1450

Sir:

Applicants have received a Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures mailed March 1, 2010.

Applicants first note that a Sequence Listing for the present application has been received as evidenced by its appearance on PAIR (see attached printout). A Computer Readable Form (CRF) copy and amendment were submitted concurrent with the Sequence Listing found on PAIR.

Despite already submitting the CRF copy and only to expedite processing, Applicants enclose herewith a Substitute Sequence Listing in full compliance with 37 C.F.R. §§1.821-1.825. The Substitute Sequence Listing in no way introduces new matter into the specification. Also submitted herewith in full compliance with 37 C.F.R. §§1.821-1.825 is an electronic CRF copy of the Substitute Sequence Listing. The electronic CRF copy of the Substitute Sequence Listing, file "2007-02-27 2520-

0132PUS1\_ST25.txt", is identical to the paper copy, except that it lacks formatting. The enclosed paper copy and the electronic CRF copy of the Substitute Sequence Listing do not include new matter.

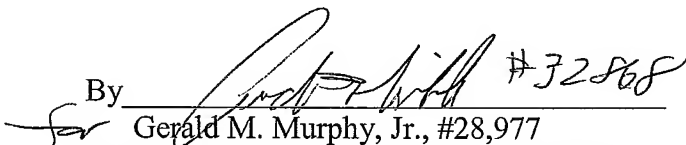
If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

APR 30 2010

GMM/psq  
2520-0132PUS1

By  #32568  
Gerald M. Murphy, Jr., #28,977  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachments:            Electronic CRF Copy of Substitute Sequence Listing  
                             Paper Copy of Substitute Sequence Listing  
                             Copy of Notice to Comply  
                             Copy of PAIR printout